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10/777,626	02/12/2004	Peng T. Ong	O03-0216	5359

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EXAMINER
HAILU, TESHOME

ART UNIT	PAPER NUMBER
2109	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/777,626	ONG ET AL.
	Examiner	**Art Unit**	
	Teshome Hailu	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 February 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-8</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>12 February 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>11/18/2004</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-21 are pending.

Drawings

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (**The specification includes number 10 to show the device on the drawing but the drawing doesn't include this sign**), Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3.   The disclosure is objected to because of the following informalities: The device **10** is not on the drawing. Appropriate correction is required.

Claim Objections

4.   Claims 3 and 14 are objected to because of the following informalities: the short form **ROM** should be write as **READ-ONLY MEMORY (ROM)** at least one time. Appropriate correction is required.

5.   Claims 4 and 15 are objected to because of the following informalities: the short form **EEPROM** should be write as **ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)** at least one time. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1-5, 7-10, 12-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by

Hoornaert et al (Hoornaert), US Pub. 2001/0054148.

As per claim 1, Hoornaert discloses:

- A multi-purpose **authentication device**, comprising: (page 1, paragraph 13, "To satisfy this

demand for an easily manufactured and distributable smart card technology the invention provides a field

programmable user authentication device, electronic token, or token device").

- **a main memory; a processor coupled to access the main memory**; (page 1, paragraph 8,

"Smart cards often contain their data stored by means of magnetic storage (a "swipe strip" or "mag

stripe") or in a *read-only memory (ROM) or random access memory (RAM),* and usually include either

a central processing unit (CPU) or a stored set of instruction in order to provide some degree of

intelligence").

- an access code generating means located in the processor for **generating a one-time access**

code associated with a single user's identity, (page 3, paragraph 36, "From then on the terminal (now

more correctly considered an electronic token device) can be used for a variety of secure applications.

For example, it can be used to log-on remotely to computer networks, *to generate one-time passwords*,

accept challenge messages and calculate responses and even generate MAC (media access control)

signatures over messages.

- **correlating authentication protocols with the access codes stored in the memory,** (page 7, paragraph 92, "The derived *keys may be compared (step 202) to ensure user authentication*(step204)") and (page 7, paragraph 94, "If this value is a value known by the service provider (step 220), they can *derive the same token device key and store that in his database (step 222) to authenticate a user.*")

- **communicating the authentication of the user's access to an external protected resource.** (page 2, paragraph 18, "In one embodiment, the invention comprises a field programmable electronic smart card terminal for *allowing secure communication between a user and a host service, service provider, or application provided by a service provider,*")

- an independent **power source** operationally connected to the processor. (Page 6, paragraph 70, " In non-connected mode the *token device works by getting power from the internal batteries* 158"). According to the invention, an independent power source 14 is a battery.

- a **communications controller for interfacing to an external processing device.** (page 2, paragraph 18, "In one embodiment, the invention comprises a field programmable electronic smart card terminal for *allowing secure communication between a user and a host service, service provider, or application provided by a service provider,*")

As per claim 2, Hoornaert discloses:

- The device of Claim 1, further comprising a **smart card coupled to the processor** through a controller for generating **cryptographic keys, for performing encryption, decryption and signing of the single user for gaining access to the external protected resource.** (Page 6, paragraph 67, "The token device can interoperate with other special cards. Once in connected monde the *token device* can be designed to work with Java cards, and with *smart cards with cryptographic co-processor such as RSA cards*"). Further hoornaert disclosed, (Abstract, line 4-7, "The combination of token device and *smart card* may then be used for a variety of application that include *user authentication, secure access, encryption*").

As per claim 3, Hoornaert discloses:

-The device of Claim 2, wherein said **smart card is provided with a programmable ROM**.

(Page 4, paragraph 52, "In one embodiment, the original software used with the *smart card* is already

factory programmed during manufacturing into a *programmable Read Only Memory (ROM)* area of the

token device").

As per claim 4, Hoornaert discloses:

- The device of Claim 3, wherein said **programmable ROM is EEPROM**. (Page 7, paragraph 99,

"*The storage medium can include, but is not limited to, EEPROMs*").

As per claim 5, Hoornaert discloses:

- The device of Claim 3, further comprising an auxiliary **memory for storing user credentials**

(Page 2, paragraph 19, "receiving at said generic smart card reader a user *smart card having stored*

thereon a user identification data").

- a controller for **interfacing with external hardware, the main memory, the smart card and**

the processor. (Page 5, paragraph 57, "The different elements of the token device can be divided into 3

interface levels: the interface with the user, *the interface with external devices such as a connected*

PC, and the interface with the smart card"). Further Hoornaert disclosed, (page 1, paragraph 8, "Smart

cards often contain their data stored by means of magnetic storage (a "swipe strip" or "mag stripe") or in a

read-only memory (ROM) or random access memory (RAM), and usually include either *a central*

processing unit (CPU) or a stored set of instruction in order to provide some degree of intelligence").

As per claim 7, Hoornaert discloses:

- The device of Claim 1, further comprising a **display screen associated with the processor**.

(Page 5, paragraph 59, "In one embodiment of the smart card terminal/token device, the user interface

has two elements, *a display* and a keypad").

As per claim 8, Hoornaert discloses:

- The device of Claim 7, wherein/ said processor controls operation of the **display screen**

for displaying a passcode for a predetermined period of time and for de-activating the display

screen upon passage of the predetermined period of time. (Page 6, paragraph 69, "An internal clock

160 is required for token device *time-dependent application* such as *time-based password, time*

based signature etc"). In addition Hoornaert disclosed, (Page 5, paragraph 59, "In one embodiment of

the smart card terminal/token device, the user interface has two elements, *a display* and a keypad").

Time-based password inherently indicates that de-activating the screen upon passage of the

predetermined period of time.

As per claim 9, Hoornaert discloses:

- The device of Claim 1, wherein said processor is operationally connected to a **control button**

for activating the processor and **generating the passcode upon demand**. (Page 7, paragraph 92, "In

this security mode the token device random *generator generates a one time "historical" secret* that is

displayed (step 196)"). In addition Hoornaert disclosed, (page 7, paragraph 96, "the token device is

initialized each time the smart card is introduced") and (page, paragraph 38, "A particular user 124

receives one of the smart card terminal, and *inserts their own personal smart card 126 into the*

terminal to create a personalized electronic token 126/128"). Where a particular user inserts his/her

smart card, inherently indicate that generating the pass code upon demand.

As per claim 10, Hoornaert discloses:

- The device of Claim 1, wherein said **communications controller uses a USB interfaces**.

(Page 5, paragraph 62, "*A universal serial bus (USB) connection* is optionally available for *interface*

with a personal computer (PC)").

As per claim 12, Hoornaert discloses:

- The device of Claim 1, wherein said independent **power source is a replaceable battery**.

(Page 4, paragraph 47, "When the voltage level drops under a predefined level, the token device enters a **battery fail phase**, and signals a "battery low" warning. **The battery must then be replaced** in order to keep the RAM contents intact").

As per claim 13, the rejection of claim 1 is incorporated and further Hoornaert discloses:

- a **non-volatile storage memory** coupled to a controller for providing an **interface of the processor to the external protected resource**; (page 4, paragraph 45, "In the initial programming phase, the token device is shipped to the system owner. As shipped, it contains all required parameters for the system owner in a built-in read only memory (ROM)") and (Page 5, paragraph 57, "The different elements of the token device can be divided into 3 interface levels: the interface with the user, **the interface with external devices such as a connected PC, and the interface with the smart card**"). Where ROM is known as a non-volatile storage memory.

- a smart card operationally connected to the controller for providing encryption and decryption functions and enabling identity management of the user. (Page 6, paragraph 78, "In some embodiments the token device supports **Data Encryption Standard (DES)** and **triple DES**. In some embodiments, the token device also supports the **PKA mechanism** to unlock a secret that resides in encrypted mode on a PC") and (Page 6, paragraph 78, "**using a smart card** containing **private keys and digital certificates on the smart card to transfer these keys** and certificates to the application in the PC").

Claim 14 is rejected under the same reason *set forth in rejection of claim 3:*

Claim 15 is rejected under the same reason *set forth in rejection of claim 4:*

Claim 16 is rejected under the same reason *set forth in rejection of claims 1, 8 and 9:*

Claim 17 is rejected under the same reason *set forth in rejection of claim 8:*

Claim 18 is rejected under the same reason *set forth in rejection of claims 8 and 9:*

Claim 19 is rejected under the same reason *set forth in rejection of claim 10:*

Claim 21 is rejected under the same reason *set forth in rejection of claim 12:*

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
> are such that the subject matter as a whole would have been obvious at the time the invention was made to
> a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

9.   Claims 6, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoornaert

as applied to claims 1-5, 7-10, 12-19 and 21 above, and further in view of Mok et al, US Pub.

2003/0097586.

        As per claim 6, Hoornaert discloses:

        - The device of Claim 1, wherein said processor controls operation of the device between an

active mode, a standby mode and an "off" mode. (Page 5, paragraph 60, *The ON/OFF key* should be

protected against an accidental, continuous ON state during transport. This helps to prevent unnecessary

battery drain"). Where the active mode can be an on mode.

        Hoornaert dose not explicitly discloses, **a standby mode.** On the other hand, on the same field of

endeavor, Mok teaches the above limitation as, (page 5, paragraph89, "the process flow of an integrated

motion detector and *transponder reader* is shown. The process flow is similar to FIG. 7 except that the

device is in standby mode until activated by the motion detector identifying a moving object"). According

to Mok, (page 1, paragraph 24, "Advantageously, the card reader/writer is integrated with an

identification *authentication device* so as to authenticate the identity of a carrier of the transponder prior

to writing a replacement unique identifier to the *transponder of the carrier.*")

        Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

invention was made, to modify the teaching of Hoornaert and include the standby mode using the

teaching of Mok. The modification would be obvious because one of ordinary skill in the art would be

motivated to add a standby mode to the system having a power source in order to save a power drain.

        As per claim 11, hoornaert discloses:

        - The device of Claim 1, wherein said independent **power source is a rechargeable battery**.

(Page 6, paragraph 70, "In non-connected mode the token device works by *getting power from the*

internal batteries 158").

        Hoornaert dose not explicitly discloses, the battery is a **rechargeable battery**. On the other hand,

on the same field of endeavor, Mok teaches the above limitation as, (page 3, paragraph 65, "the portable

reader 31 is provided with a cellular transmission reception capability to enable communication with the

security processor. The cellular transmissions/reception capability also allows the portable reader to be

used as a cellular telephone to communication with other portable readers or third parties. Preferably, the

portable reader is provided with *a rechargeable battery power source* and an interactive touch screen

display").

        Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

invention was made, to modify the teaching of Hoornaert and include the rechargeable battery using the

teaching of Mok. The modification would be ovious because one of ordinary skill in the art would be

motivated to add a rechargeable battery to the system having a power source in order to save the cost of

replacing battery.

        Claim 21 is rejected under the same reason *set forth in rejection of claim 11:*

Conclusion

10.   The prior art made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Methods and apparatus for awarding prizes based on authentication of computer generated

outcomes using coupons, US Pub. No 2003/0177347.

TITLE: System and method for security of computing devices, US Pub. No. 2003/0037237.

TITLE: Universal positive pay match, authentication, authorization, settlement and clearing system, US

Pub. No. 2002/0052852.

TITLE: Portable authentication device and method using iris patterns, US 6,532,298.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Teshome Hailu whose telephone number is (571) 270-3159. The examiner can normally

be reached on Mon-Fri 7:30a.m. to 5:00p.m. PST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Chamili Das can be reached on (571) 272-3696. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-

1000.

Teshome Hailu

Patent Examiner

TH

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CHAMELI C-DAS

CHAMELI DAS
SUPERVISORY PATENT EXAMINER

7/30/07